

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of electronic watermarking signals representing a work comprising:

sampling input signals using an uneven sampling rate, wherein the input signals are signals representing the work;

outputting unevenly sampled signal data representing the work.

2. (original) The method according to claim 1, wherein the sampling comprises sampling at a rate such that an average sampling frequency is greater than or equal to twice the highest frequency in the input signals.

3. (original) The method according to claim 1, wherein the sampling comprises sampling using a pseudo-random sampling rate.

4. (original) The method according to claim 1, wherein the sampling rate has an unevenness which is pseudo-random and the unevenness is less than about thirty per cent of the corresponding sampling period.

5. (original) The method according to claim 1, wherein the input signals are analog input signals, the method further comprising:
outputting unevenly sampled digital signals.

6. (currently amended) A method of authentication of candidate data comprising:
sampling original signals using an uneven sampling rate to produce unevenly
sampled original signal data; [[and]]
comparing the unevenly sampled original signal data with the candidate data for a
degree of match; and
determining whether the candidate data is authentic based on the degree of match.

7. (original) The method according to claim 6, further comprising:
normalizing the candidate data prior to the comparing; and
normalizing the unevenly sampled original signal data prior to the comparing.

8. (original) The method according to claim 7, wherein the comparing comprises
calculating a mean square difference between the normalized candidate data and the
normalized unevenly sampled original signal data.

9. (original) The method according to claim 8, further comprising comparing the
calculated mean square difference to a threshold value, wherein if the calculated mean
square difference is greater than the threshold value, the candidate data is determined to
be inauthentic.

Claim 10 (canceled)

11. (currently amended) An apparatus for electronic watermarking signals representing a work, comprising:

input means for receiving input signals, wherein the input signals are signals representing the work; and

sampling means for sampling the input signals using an uneven sampling rate and outputting unevenly sampled signal data representing the work.

12. (original) The apparatus according to claim 11, wherein the sampling means comprises:

an analog-to-digital converter; and

control means for controlling the analog-to-digital converter to have an uneven sampling rate.

13. (original) The apparatus according to claim 12, wherein the control means comprises a pseudo-random number generator.

14. (original) The apparatus according to claim 12, wherein the control means controls the analog-to-digital converter to sample the input signals at a rate such that an average sampling frequency is greater than or equal to twice the highest frequency in the input signals.

15. (original) The apparatus according to claim 14, wherein the sampling rate has an unevenness which is pseudo-random and the unevenness is less than about thirty per cent of the corresponding sampling period.

16. (currently amended) An apparatus for authentication of candidate data comprising:

sampling means for sampling original signals using an uneven sampling rate to produce unevenly sampled original signal data; and

comparing means for comparing the unevenly sampled original signal data with the candidate data for a degree of match and determining whether the candidate data is authentic based on the degree of match.

17. (original) The apparatus according to claim 16, further comprising:

first normalizing means for normalizing the candidate data and providing normalized candidate data to the comparing means; and

second normalizing means for normalizing the unevenly sampled original signal data and providing normalized unevenly sampled original signal data to the comparing means.

18. (original) The apparatus according to claim 17, wherein the comparing means comprises mean square difference calculating means for calculating a mean square difference between the normalized candidate data and the normalized unevenly sampled original signal data

19. (original) The apparatus according to claim 18, wherein the comparing means further comprises threshold means for comparing the calculated mean square difference to a threshold value, wherein if the calculated mean square difference is greater than the threshold value, the candidate data is determined to be inauthentic

Claims 20-23 (canceled)

24. (currently amended) A data processing system comprising:
means for implementing a data watermarking processing comprising
input means for receiving input signals, wherein the input signals are
signals representing a work, and
sampling means for sampling the input signals using an uneven sampling
rate and outputting unevenly sampled signal data representing the work; and
means for implementing a data watermark authentication processing comprising
comparing means for comparing the unevenly sampled signal data
representing the work with the candidate data for a degree of match and determining
whether the candidate data is authentic based on the degree of match.

Claim 25 (new): The data processing system according to claim 24, wherein the
means for implementing a data watermark authentication processing further comprises:

first normalizing means for normalizing the candidate data and providing
normalized candidate data to the comparing means; and

second normalizing means for normalizing the unevenly sampled signal data and
providing normalized unevenly sampled signal data to the comparing means.